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EXAMINER
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ROHWER, JACOB P

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/974,906	<b>Applicant(s)</b> FUKASAWA, KENJI	
	<b>Examiner</b> Jacob P. Rohwer	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2, 10, 33-34, 45 and 71-72** are rejected under U.S.C 103(a) as being unpatentable over US Patent No 6,147,772 to Pritchett, in view of US Patent No 5,748,342 to Usami.

Regarding claim 1, Pritchett discloses an image processing apparatus (**Fig 1 #131**) for performing image processing on image data, comprising:

means for acquiring an image file that contains the image data (**Fig 1 #110**); and

means for performing image processing on said image data, including means for performing color conversion of said out of gamut information to a wide gamut color space, wherein a gamut of the wide gamut color space is sufficiently large to accommodate the image data associated with the out of gamut information. (**Col 5-6 Lin 65-67 and 1-9**)

Pritchett does not expressly disclose means for acquiring use information associated with said image file, said use information being indicative of whether out of gamut information for a predetermined color space is to be used in performing image processing on the image data.

However, Usami discloses means for acquiring use information associated with said image file (**Fig 20, preview screen allows user to select which image processing result is desired**), said use information being indicative of whether out of gamut information for a predetermined color space is to be used in performing image processing on the image data. (**Fig 19 and 20 disclose image processing with and without compression.**)

The Pritchett and Usami Patents are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the means for acquiring use information as specified in the Usami Patent, in order to determine whether or not to expand the color space as specified in the Pritchett Patent. Furthermore, the Pritchett Patent discloses color conversion through a second space expansion, and Usami discloses allowing the user to analyze and decide different processing algorithms using compression or not. In view of Pritchett, it would have been obvious to include another processing preview including color space expansion to the user in Fig 20 of Usami. Furthermore Usami discloses the technique can be used to broaden the second color space to account for a wider input gamut. (**Col 11 Lin 49-55**)

The suggestion/motivation for combining would have been to save time in processing the out-of-gamut information when the user specifies it is not necessary to achieve the image output desired.

Therefore it would have been obvious to combine the Pritchett and Usami Patents to obtain the invention in claim 1.

Regarding claim 2, which depends from claim 1, Usami further discloses an image processing apparatus according to claim 1, wherein:

said means for performing color conversion performs image processing of said image data via a pre-established color space having a gamut equivalent to that of said predetermined color space when the means for analyzing decides not to use said out of gamut information. **(Usami Fig 21 S31, User selects no color space compression)**

Regarding claim 10, the apparatus disclosed in the combination Pritchett and Usami as specified in claim 1 above corresponds to the computer program product claimed in claim 10. Furthermore, Pritchett discloses computer software applications that allow a user to process the image on the apparatus of claim 1. **(Fig 1 #130, Col 4 Lin 20-22)** Additionally, Pritchett discloses outputting the image. **(Fig 1 #140 and #150)**

Regarding claim 33, please see rejection of claim 1 above.

Regarding claim 34, which depends from claim 33, please see rejection of claims 1 and 2 above.

Regarding claim 45, which depends from claim 33, please see rejection of claims 1 above. Additionally, Usami discloses a printer configured to output the image. **(Fig #1b #7-9)**

Regarding claim 71, please see rejection of claim 1 above. Additionally the operator provides the means for instructing the use of out of gamut information for the predetermined color space.

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Regarding claim 72, which depends from claim 71, please see rejection of claims 1 and 2 above.

**Claims 3, 7, 19-22, 27-29, 32, 35-38 and 44** are rejected under U.S.C 103(a) as being unpatentable over Pritchett and Usami as specified in claim 1, further in view of US Patent No 6,758,574 to Roberts.

Regarding claim 3, which depends from claim 1, the combination of Pritchett and Usami further discloses an image processing apparatus according to claim 1, wherein:

said image data contained in said image file is defined in a first color space;

said means for acquiring includes means for converting the image data contained in the image file from said first color space to a third color space (**Col 4 Lin 45-47, YCbCr→RGB, Video Equipment to Computer Equipment**) using out of gamut information. (**Col 5-6 Lin 65-67 and 1-9**)

The combination does not expressly disclose an intermediary conversion from a first color space to a second color space.

However, Roberts discloses an intermediary step consistent with the apparatus of claim 1 and the background of the invention in the current application. The apparatus of claim 1 converts YCbCr→RGB for a computer display by expanding the RGB color space to accommodate all input values. The background of the invention of the current application discloses that the RGB color space is used by the image capturing devices and then stored in JPEG Files using YCbCr color space. (**Page 1 Lin 24-30**)

Furthermore, when the JPEG File is decompressed in order to be displayed on a CRT, RGB values of the original captured image are out of the gamut of the sRGB color

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space standard in computer monitors as disclosed. **(Page 2 Lin 11-15)** The Roberts reference further discloses an intermediary step of converting YCbCr→RGB and then converting to sRGB, **(Fig 2c)** consistent with disclosure in the background of the invention.

The Roberts Patent and the combination of Pritchett and Usami are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the intermediary color space conversion as specified in the Roberts Patent, in order to expand the color space of the computer monitor to accommodate out of gamut information input from the DVC, as specified in the combination of Pritchett and Usami.

The suggestion/motivation for doing so would have been to account for all the necessary steps of color conversion, when converting from YCbCr to an extended sRGB color space.

Therefore it would have been obvious to combine the Roberts Patent with the combination of Pritchett and Usami to obtain the invention in claim 3.

Regarding claim 7, which depends from claim 3, the combination further discloses in Roberts an image processing apparatus according to Claim 3, wherein:

said means for converting the image data contained in the image file from said first color space to a second color space includes means for performing a first matrix

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operation on image data represented by said first color space, **(Roberts Col 4 Lin 7-12)**  
and

said means for performing color conversion converts the image data in said second color space to a third color space includes means for performing a second matrix operation on image data represented by said second color space. **(Roberts Col 3 Lin 55-56)**

Regarding claim 19, please see rejection of claims 1 and 3 above. The apparatus in claims 1 and 3 perform the method of claim 19.

Regarding claim 20, which depends from claim 19, Roberts further discloses the method of claim 19 wherein:

said first color space is a YCbCr color space;

said second color space is a first RGB color space; and

said third color space is a second RGB color space. **(Fig 1 and Fig 2c)**

Roberts discloses that there are multiple conversions between standard color spaces. **(Fig 1)** This disclosure incorporates the conversions from a YCbCr→(1)RGB→(2)RGB.

Regarding claim 21, which depends from claim 20, the combination further discloses that the second color space is a sRGB color space. Please see rationale provided in claim 3. Pritchett discloses converting from a YCbCr→sRGB color space that accommodates all input values, so the intermediary color space is a standard sRGB color space as specified in claim 3.



Regarding claim 22, which depends from claim 21, Roberts further discloses color conversion from YCbCr→(1)RGB→CIELAB. **(Fig 1)**

Regarding claim 27, which depends from claim 19, please see rejections of claims 1, 3 and 7 above. The apparatus in claims 1, 3 and 7 perform the method of claim 27.

Regarding claim 28, which depends from claim 19, Usami further discloses a print engine **(Fig 1b #7-9)** for outputting said image data onto a print medium.

Regarding claim 29, please see rejections of claims 1 and 3 above. The apparatus in claims 1 and 3 perform the method of claim 29.

Regarding claim 32, please see rejection of claims 1 and 3 above. The apparatus in claims 1 and 3 perform the method of claim 32.

Regarding claim 35, which depends from claim 33, please see rejection of claims 1 and 3 above.

Regarding claim 36, which depends from claim 35, please see rejection of claims 1, 3 and 20.

Regarding claim 37, which depends from claim 36, please see rejection of claims 1, 3 and 21.

Regarding claim 38, which depends from claim 35, please see rejection of claims 1, 3 and 22.

Regarding claim 44, which depends from claim 35, please see rejection of claims 1, 3 and 7 above.

**Claims 4-6, 8-9, 11-12, 39-41, 43, and 46-48** are rejected under U.S.C 103(a) as being unpatentable over Pritchett and Usami as specified in claim 1, further in view of US Patent No 6,108,443 to Ito.

Regarding claim 4, which depends from claim 1, the combination of Pritchett and Usami does not expressly disclose an image processing apparatus according to claim 1, wherein:

said image data contained in said image file is produced to fall within a first color space and includes

first positive color representation values that are color representation values lying within a gamut of said predetermined color space,

second positive color representation values, and

negative color representation values that are color representation values lying outside the gamut of said predetermined color space; and said means for acquiring includes

means for converting the color space of said image data from said first color space to a second color space by processing said negative color values and at least one of said first positive color representation values and said second positive color representation values.

However, Ito discloses an image processing apparatus wherein:

image data is produced to fall within a first color space and includes

first positive color representation values (**Fig 3 #12**) that are color representation values lying within a gamut of said predetermined color space, **(The predetermined color space is represented by #13 in Fig 3)**

second positive color representation values, **(Values 1 to approximately 150 in Fig 3 #12 are not within predetermined color space)** and

negative color representation values that are color representation values lying outside the gamut of said predetermined color space **(Fig 3 #12, Values less than zero)**; and said means for acquiring includes

means for converting the color space of said image data from said first color space to a second color space by processing said negative color values and at least one of said first positive color representation values and said second positive color representation values. **(Fig 3 discloses Mapping the first color space into the second predetermined color space using the first and second positive values and the negative values)**

The Ito Patent and the combination of Pritchett and Usami are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the positive and negative values as specified in the Ito Patent, in order to convert from a first to a second color space as specified in the combination of Pritchett and Usami.

The suggestion/motivation for doing so would have been to accommodate all the values input in the image file so that the image quality can be maximized when output on, for example, a CRT display.

Therefore it would have been obvious to combine the Ito Patent with the combination of Pritchett and Usami to obtain the invention in claim 4.

Regarding claim 5, which depends from claim 4, the combination of Pritchett, Usami and Ito further discloses an image processing apparatus according to claim 4, wherein the said means for performing image processing includes means for correcting gamma information in said image data. **(Usami, Col 10 Lin 42-52)**

The combination of Pritchett, Usami and Ito does not expressly disclose using a first gamma correction value when said image data contains said at least one of said first and said second positive color representation values, and using a second gamma correction value that is different from said first gamma correction value when said image data contains negative color representation values.

However, official notice is taken, that different colors use different gamma correction coefficients when converting from one color space to another. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use a first gamma correction value when said image data contains at least one of a first and second positive color representation values, and use a second gamma correction value that is different from first gamma correction value when image data contains negative color representation values.

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The suggestion/motivation for doing so would have been to achieve the correct luminance for each color when the image data is converted to the second color space.

Regarding claim 6, which depends from claim 5, the combination of Pritchett, Usami and Ito further discloses an image processing apparatus according to claim 5 wherein:

said first color space is an RGB color space having a R component, a G component, and a B component; and

said second gamma correction value includes different component values for each of said R component, said G component, and said B component. **(Usami, Col 10 Lin 42-52)**

Regarding claim 8, please see the rejection of claims 1 and 4. All the claimed matter is incorporated into claims 1 and 4.

Regarding claim 9, which depends from claim 8, please see rejection of claims 1, 4 and 5.

Regarding claim 11, which depends from claim 10, please see rejections of claims 4 and 10 above.

Regarding claim 12, which depends from claim 11, please see rejection of claims 1, 4, 5 and 10.

Regarding claim 39, which depends from claim 33, please see rejection of claims 1 and 4 above.

Regarding claim 40, which depends from claim 39, please see rejection of claims 1, 4 and 5.

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Regarding claim 41, which depends from claim 40, please see rejection of claims 1, 4 and 5. Furthermore, it is known that within a gamma correction look up table, certain values will be smaller than other values used.

Regarding claim 43, which depends from claim 40, please see rejection of claims 1, 4, 5 and 6.

Regarding claim 46, please see rejection of claims 1 and 4 above.

Regarding claim 47, which depends from claim 46, please see rejection of claims 1, 4 and 5.

Regarding claim 48, which depends from claim 46, please see rejection of claims 1, 4 and 45 above.

**Claims 23, 30, and 42** are rejected under U.S.C 103(a) as being unpatentable over Pritchett and Usami as specified in claim 1, in view of Roberts as specified in claim 3, and further in view of Ito as specified in claim 4.

Regarding claim 23, which depends from claim 19, please see rejection of claims 1, 3 and 4 above. The apparatus in claims 1, 3 and 4 perform the method of claim 23.

Regarding claim 30, which depends from claim 29, please see rejection of claims 1, 3 and 4 above. The apparatus in claims 1, 3, and 4 perform the method of claim 30.

Regarding claim 42, which depends from claim 39, please see rejection of claims 1, 3 and 4 above.

**Claims 13-15, 49 and 59-62** are rejected under U.S.C 103(a) as being unpatentable over Pritchett and Usami as specified in claim 1, and further in view of US Patent Number 5,528,293 to Watanabe.

Regarding claim 13, the combination of Pritchett and Usami discloses a device comprising:

means for generating image data; (**Pritchett Fig 1 #110**) and

means for acquiring use information that is indicative of whether out of gamut information for a predetermined color space is to be used in performing image processing on said image data. (**Please see rejection of claim 1 above**)

The combination does not expressly disclose means for generating image processing control information, and a device for generating an image file that contains image data and image -processing control information for subsequent image processing of the image data.

However, Watanabe discloses a device for generating an image file that contains image data and image processing control information (**Fig 2a, Application Data**) for subsequent image processing of the image data. (**Fig 2a, Col 5 Lin 25-43**)

The combination of Pritchett and Usami and the Watanabe Patent are combinable because they both relate to generating image data for further processing.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the generation of an image file that contains image data and image processing control information for subsequent image processing of the image data as specified in the Watanabe Patent, in order to convert, display and eventually print image data as specified in the combination of Pritchett and Usami.

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The suggestion/motivation for doing so would have been to provide the ability to transfer digital image files directly to a display and printer via transferring a memory card.

Therefore it would have been obvious to combine the Watanabe Patent with the combination of Pritchett and Usami to obtain the invention in claim 13.

Regarding claim 14, which depends from claim 13, Watanabe further discloses a device for generating an image file according to claim 13, further comprising:

means for conveying said image file to another device via at least one of a removable memory card, **(Fig 1 #30)** a wired communication link, and a wireless communication link.

Regarding claim 15, which depends from claim 13, Watanabe further discloses a device for generating an image file according to claim 13, wherein:

the means for generating the image data being at least one of a DSC, **(Fig 1 Lin 37-38)** DVC and a scanning device.

Regarding claim 49, please see rejection of claims 1 and 13 above.

Regarding claim 59, which depends from claim 49, Watanabe further discloses a computer readable memory configured to hold the image file and control information.

**(Fig 1 #30)**

Regarding claim 60, which depends from claim 59, please see rejection of claims 1, 13 and 59. Additionally, the computer readable memory is a removable memory card. **(Fig 1 #30)**



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Regarding claim 61, which depends from claim 59, Pritchett further discloses an output port coupled to said computer readable memory and configured to convey said image file to another device via at least one of a wired connection and a wireless communication link. **(Fig 1 discloses a DVC connected to a PC through a wired connection)**

Regarding claim 62, which depends from claim 49, please see rejection of claims 1, 13 and 15 above.

**Claims 16, 63 and 64** are rejected under U.S.C 103(a) as being unpatentable over Pritchett, Usami, and Watanabe as specified in claim 13, further in view of US Patent No 6,812,961 to Parulski et al.

Regarding claim 16, which depends from claim 13, the combination of Pritchett, Usami and Watanabe does not disclose a device for generating an image file according to claim 13, wherein:

said means for generating the image file is configured to arrange said image file as an Exif file, and arrange said image processing control information in a Makernote portion of the Exif file.

However, Parulski further discloses a device for generating an image file, wherein:

said means for generating the image file is configured to arrange said image file as an Exif file, and arrange said image processing control information in a Makernote portion of the Exif file. **(Col 4 Lin 35-43)**

The combination of Pritchett, Usami and Watanabe and the Parulski Patent are combinable because they both relate to generating image data with attached application data or metadata for display and printing.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the arrangement of an Exif file as specified in the Parulski Patent, in order to provide image data and application data for color conversion as specified in the combination of Pritchett, Usami and Watanabe.

The suggestion/motivation for doing so would have been to allow the storage of image metadata relating to the actual image data. **(Col 4 Lin 39-40)**

Therefore it would have been obvious to combine the Parulski Patent with the combination of Pritchett, Usami and Watanabe to obtain the invention in claim 16.

Regarding claim 63, which depends from claim 49, please see rejection of claims 1, 13 and 16 above.

Regarding claim 64, which depends from claim 63, please see rejection of claims 1, 13 and 16 above.

**Claims 50-53** are rejected under U.S.C 103(a) as being unpatentable over Pritchett, Usami and Roberts as specified in claim 3 above, further in view of Watanabe as specified in claim 13.

Regarding claim 50, which depends from claim 49, please see rejection of claims 1, 3 and 13 above.

Regarding claim 51, which depends from claim 50, please see rejection of claims 1, 3, 13 and 20.

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Regarding claim 52, which depends from claim 51, please see rejection of claims 1, 3, 13 and 21.

Regarding claim 53, which depends from claim 50, please see rejection of claims 1, 3, 13 and 22.

**Claims 17, 18, 54-55, 56, 58, and 65-70** is rejected under U.S.C 103(a) as being unpatentable over Pritchett, Usami, and Ito as specified in claim 4 above, further in view of Watanabe as specified in claim 13 above

Regarding claim 17, please see rejection of claims 1, 4, 5 and 13. Furthermore all the matter claimed is incorporated in claims 1, 4, 5 and 13.

Regarding claim 18, which depends from claim 17, please see rejection of claims 1, 4, 5 and 13. Furthermore all the matter claimed is incorporated in claims 1, 4, 5 and 13.

Regarding claim 54, which depends from claim 49, please see rejection of claims 1, 4 and 13 above.

Regarding claim 55, which depends from claim 54, please see rejection of claims 1, 4, 5 and 13.

Regarding claim 56, which depends from claim 55, please see rejection of claims 1, 4, 5, 13 and 41.

Regarding claim 58, which depends from claim 55, please see rejection of claims 1, 4, 5, 6 and 13.

Regarding claim 65, please see rejection of claims 1, 4, 5 and 13.

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Regarding claim 66, which depends from claim 65, please see rejection of claims 1, 4, 5, 6 and 13.

Regarding claim 67, which depends from claim 65, please see rejection of claims 1, 4, 5, 6, 13 and 59.

Regarding claim 68, which depends from claim 67, please see rejection of claims 1, 4, 5, 6, 13 and 60.

Regarding claim 69, which depends from claim 68, please see rejection of claims 1, 4, 5, 6, 13 and 61.

Regarding claim 70, which depends from claim 66, please see rejection of claims 1, 4, 5, 6, 13 and 62.

**Claim 57** is rejected under U.S.C 103(a) as being unpatentable over Pritchett, Usami, Roberts and Watanabe as specified in claim 50 above, further in view of Ito as specified in claim 4 above.

Regarding claim 57, which depends from claim 54, please see rejection of claims 1, 3, 4 and 13 above.

**Claim 24-26 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Pritchett, Usami and Roberts as specified in claim 3 above, and further in view of Ito as specified in claims 4-6.

Regarding claim 24, which depends from claim 19, please see rejection of claims 1, 3, 4 and 5.

Regarding claim 25, which depends from claim 19, please see rejection of claims 1, 3, 4, 5 and 41.

Regarding claim 26, which is assumed to depend from claim 24, please see rejection of claims 1, 3, 5, 6 and 24.

Regarding claim 31, which depends from claim 30, please see rejection of claims 1, 3, 4 and 5.

### ***Response to Arguments***

Applicant's arguments filed 26 June 2006 have been fully considered but they are not persuasive. Applicant first argues that the combination of Pritchett in view of Usami does not raise a prima facie case of obviousness in regard to how the Pritchett Reference discloses converting a color from a first color space to a second color space through the use of an extended color space and how the Usami Reference discloses a technique premised on color space compression. In response, examiner refers applicant to a previously cited disclosure in Usami, Col 11 Lin 46-55, where "a color space compression process for broadening the color reproduction range may be used" is specified. In light of this disclosure, the Usami and Pritchett both teach expanding a color reproduction range and are therefore combinable.

Next, applicant argues that the Usami Reference does not disclose a configuration that determines whether or not out of gamut information for a predetermined color space is to be used. In response examiner refers applicant to Usami Col 5 Lin 42-49 where two different methods are specified, one where the user selects from the preview as disclosed in Fig 20, a conventional method without performing any processing for input image data outside the color reproduction range, and a method using a method for converting input image data into image data within the

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color reproduction range. Furthermore, Fig 21 shows the method of Fig 6 without the masking-processing step as argued by applicant. As a result, the Usami Reference discloses specifying use information, indicative of whether or not out of gamut information for a predetermined color space is to be used. Furthermore, applicant argues that none of the Pritchett, Usami, and Roberts References discloses or suggests using different gamma correction values for two pieces of image data that respectively contain positive color representation values and negative color representation values, as specified in claims 9 and 24. In response, examiner notes that this point has been addressed in the previous (and current) office action in the rejection of claim 5 as referenced in the rejections of claims 9 and 24, and that official notice has been taken that different colors and different input data values use different gamma correction values when converting from one color space to another. Please see rejection of claim 5 above.

Finally, the remainder of the arguments stem from the arguments based on the combination of Pritchett and Usami, as discussed above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Conclusion**

Examiner wants to remind the applicant that the new references supply new grounds for a rejection of the newly submitted but unamended claims. As a result this action is non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob P. Rohwer whose telephone number is 571-272-5509. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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